MUMBAI

SUSTAINABLE ENVIRONMENTAL PROTECTION

BY DR. R. GOPICHANDRAN

The Imperative of Stakeholder Empowerment to Sustain Environmental Protection

Some of the most frequently asked questions regarding the level of compliance with environmental regulations pertain to the diversity and mix of regulatory and fiscal instruments. The assumption is that compliance will follow logically. I wish to argue that it is equally important to address issues pertaining to the levels of technical preparedness of stakeholders to understand opportunities for improving environmental performance. For example, being able to comprehend technical barriers in improving energy efficiency, ability to use and monitor performance of the alternatives and sustain transitions. Stakeholders in this context refer to the small and medium-sized enterprises in particular, in diverse sectors, the regulatory agencies and providers of technical assistance.

This imperative emerges based on the fact that the end-user of options, particularly in industry, has to respond to compliance requirements which may operate at regional and global levels, in addition to the inevitable local compliance needs. This is particularly evident in the case of compliance with the Montreal Protocol on substances that deplete the ozone layer, the Rotterdam and the Stockholm conventions. The significance of local compliance as an augment to compliance with the regional and global compliance needs is all the more explicit when we consider the much articulated need for tackling local pollution with respect to greenhouse gases and thus having a significant effect on abating climate impacts.

Bogdonoff and Rubin (2007) have highlighted the importance of the collective first step to reduce impacts at the local level as an imperative to address the climate challenge. I refer particularly to the importance of the initiative at the local level and to an India-specific context. Several initiatives in the past, particularly in India, have also aimed at strengthening local action. These include the formation of waste minimization circles and technical capacity building on cleaner production assessments, and implementation of some options to overcome barriers in cleaner production. The most important lesson from these initiatives is the fact that the levels of technical preparedness or the willingness of firms to adopt cleaner options is rather low in the initial stages.

Interestingly, the willingness to become cleaner

appeared to grow in intensity (through the period of orientation to cleaner production) once the results of learning and implementation became evident. This observation has a very important bearing on understanding the reasons for the initial underpreparedness of stakeholders to change and should not be mistaken for inertia or recalcitrance. Yet another very important lesson is the ability of the stakeholders to comprehend opportunities which could emerge even with minimal modifications and use of locally derived knowledge relevant to the scales of production and the diversity of production techniques.

It is important to recognize this ability and foster capabilities at the local level in order to develop pools of local expertise thereby reducing costs of accessing expertise or technical assistance. The third most important lesson is the need to expand the scale of such technical assistance programs in order to reach out to a significantly large number of stakeholders in diverse sectors across the country and not restrict such initiatives to pilots and a few select sectors. Interestingly, one of the most recent initiatives in comprehensive technical capacity building oriented to market requirements on energy efficiency enhancement in industries is that of the Bureau of Energy Efficiency. It is, however, important to design programs which deliver technical assistance to the stakeholders at the respective places directly, at least to galvanize a large-scale response which can be expected to sustain itself in the longer run. Small and medium enterprises are not adequately capacity built to document information on parameters of relevance to interpret energy losses and the consequences on the scale and diversity of emissions which emanate from such processes. The need to enhance capacity to document such information cannot be overemphasized, especially when they have to respond to emerging market opportunities with respect to mitigation and abatement.

The Montreal Protocol provides some valuable lessons in the field of stakeholder empowerment aimed at initiating and sustaining collective action. The national phase-out plans for eliminating ozone depleting substances are supported by well-designed technical assistance programs which instruct the producers and the consumers regarding the range of options, sources of technical expertise, phase-out schedules, reporting mechanisms and access to financial assistance relevant to the various sectors.

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HOLIDAYS

September 3: Labor Day

A WORD FROM THE CENTER

Dr. Gopichandran's article points out the importance of working together with stakeholders and the general public as the only sustainable way to improve our system of environmental protection and achieve real environmental progress. This is becoming even more important as environmental problems become more complex and cross-cutting, such as the very real issue of climate change that the world is facing. Partnering with the public in each aspect of decision-making related to environmental protection, including the development of alternatives and the identification of a preferred solution, has led to the best outcomes. While this collaboration cannot replace the core functions of a regulatory agency – standard setting, permitting, enforcement and compliance assurance – it is a key element of any realistic and successful plan to address the climate challenge.

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A Compliance Assistance Program guides the national focal points on aspects of compliance, facilitates access to technical resources and helps articulate barriers to the concerned authorities. A detailed plan of action for overcoming barriers is then drawn up and the return to compliance is facilitated through a mutually agreed upon process. Recent discussions within the Protocol focus on making use of the elaborate institutional mechanisms established in all signatory countries to address issues pertaining to the management of chemicals through the Strategic Approach for International Chemicals Management. Several rounds of discussions with the production and consumption sectors, industry forums, regulatory agencies, as well as bilateral and multilateral institutions have helped to understand the levels of preparedness of stakeholders for engaging in collective action and fulfilling the objectives of the proposed strategic approach. Much of the success of the Protocol has been possible through this process of stakeholder engagement.

As indicated above, this mechanism provides valuable lessons for devising technical assistance and information support programs in the areas of cleaner technologies, cleaner production options and waste minimization with special reference to energy efficiency enhancement and emission reduction. It is very encouraging to see the emergence of the Asia-Pacific Partnership on Clean Development and Climate, facilitated through the U.S. Department of Energy as a means of enabling a transition to cleaner options. It is important to recognize that the Partnership would provide the much needed start-up impetus and facilitate an opportunity to understand and evaluate options for improving energy efficiency and reducing emission intensity. It is important for Indian industry to realize the importance of this handholding to integrate emerging options and sustain climate-friendly action.

Yet another interesting initiative which was enabled earlier through USAID, was capacity building in areas related to eco-industrial networking and development. Both these interventions highlight the need for a diagnostic approach and the development of locally relevant solutions which could, if required, be hybridized with knowledge and technology transfer from outside India. Several examples of eco-industrial networks covering several industrial clusters within an industrial estate

or several specialized exclusive clusters have emerged as a result of this intervention.

It is important to derive lessons pertaining to the establishment of welldesigned monitoring systems of direct application value to regulatory agencies. Systems which record and interpret variations in the composition and quantity of emissions particularly in industrial areas, have to be established to help understand source apportionment and causes for observed variations. This information will be useful to pinpoint the actual source of perturbation. It is equally important to build the capacity of communities to participate in monitoring and reporting in order to reduce anomalies and discrepancies in conflict resolution. These insights emerge through interactions with stakeholders in several developing countries particularly in the context of assessing their technical preparedness and information needs to participate effectively in collective environmental action. The need for strengthening information support and technical assistance emerges as an imperative, especially when the diversity and rigor of implementation of several multilateral agreements call for a high degree of compliance in order to reduce externalities inflicted on global commons. These aspects gain greater significance when market mechanisms are superimposed on command and control regimes which emphasize accountability, transparency, consistency and precise measurements. There is no scope for mediocrity in the changing context of precision in environmental management. This therefore reemphasizes the need for capacity building of stakeholders to engage in well-informed environmental action

We are grateful to Dr. R. Gopichandran for writing this article especially for our monthly bulletin. Dr. Gopichandran is Program Director, Environment Management, Centre for Environmental Education (CEE), Ahmedabad. CEE is a national institution engaged in developing programs and material to increase awareness about the environment and sustainable development. In 2000, Dr. Gopichandran had, at the invitation of the U.S. Government, participated in an International Visitor Program on the environment.

The opinions expressed in Dr. Gopichandran's article do not necessarily reflect the views or policies of the U.S. Government.

U.S. Climate Change Vision

President George W. Bush has clearly acknowledged the reality and seriousness of climate change and launched a responsible and practical climate policy with three primary aims:

- > To introduce new technologies for producing and using energy that can dramatically weaken the link between economic growth and the generation of greenhouse gases
- > To improve scientific tools and understanding needed to respond more effectively to the problems posed by climate change
- To enlist the cooperation of other nations to address the entire spectrum of climate change issues

U.S. climate-oriented technology initiatives are ambitious on a scale commensurate with the challenges: development of hydrogen technologies that can enable more efficient and carbon-free means of

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transportation and other applications, new kinds of power plants – "FutureGen" plants – that generate power from hydrocarbons but release no carbon into the atmosphere, and a renewed commitment to research on future carbon-free forms of power generation. The vision here is to forge new energy technologies that all nations can use to meet their goals of limiting greenhouse gas emissions, without compromising the sustained improvements in living standards to which all nations aspire.

Climate science initiatives are critically important for the kind of longrange planning that must be done region by region around the world to rise to the challenge of climate change. Even modest advances in our understanding of weather and climate can have a positive impact. The United States is spending nearly two billion dollars per year on climate science within a well-defined strategic plan, developed and reviewed in consultation with the international scientific community and the National Academy of Sciences.

International cooperation is crucial for observing, understanding, preparing for, and mitigating the potential impacts of climate change. The United States is by far the largest funder of activities under the United Nations Framework Convention on Climate Change and the Intergovernmental Panel on Climate Change.

BUSH ADMINISTRATION INTERNATIONAL INITIATIVES

- > The **Methane to Markets Partnership** is an action-oriented initiative that will reduce global methane emissions to enhance economic growth, promote energy security, improve the environment and reduce greenhouse gases. Fourteen countries launched the initiative at a ministerial meeting on November 16, 2004, in Washington, D.C.
- > The International Partnership for a Hydrogen Economy was formed to implement internationally the goals of President Bush's Hydrogen Fuel Initiative and FreedomCar Partnership. The Partnership's 15 countries and the European Union (EU) are working together to advance the global transition to the hydrogen economy with the goal of making fuel cell vehicles commercially available by 2020.
- > The Carbon Sequestration Leadership Forum is a framework to work cooperatively with global partners, including developing countries, on research, development, and deployment of carbon sequestration technologies in the next decade.
- > The Generation IV International Forum for nuclear power is a multilateral partnership fostering international cooperation in research and development for the next generation of safer, more affordable, and more proliferation-resistant nuclear energy systems.
- > The Renewable Energy and Energy Efficiency Partnership was formed at the World Summit on Sustainable Development in Johannesburg, South Africa, in August 2002, and seeks to accelerate and expand the global market for renewable energy and energy-efficient technologies.

Courtesy: http://usinfo.state.gov/journals/itgic/0605/ijge/ marburger.htm

NOTES FROM THE AMERICAN LIBRARY

A Select Webliography on Environmental Issues

http://www.cslforum.org/

Carbon Sequestration Leadership Forum

http://www.ceert.org/

Center for Energy Efficiency and Renewable Technologies

http://www.ciel.org/

The Center for International Environmental Law

http://www.ceres.org/

The Coalition for Environmentally Responsible Economies

http://www.earthday.gov/

EarthDay.gov

http://www.energystar.gov/

Energy Star

http://www.envirolink.org/

EnviroLink – The Online Environmental Community

http://www.eesi.org/index.html

Environmental and Energy Study Institute

http://www.ecos.org/

The Environmental Council of the States

http://www.usa.gov/Citizen/Topics/Environment_Agriculture.shtml USA.gov – Environment, Energy, and Agriculture

http://www.ipcc.ch/

Intergovernmental Panel on Climate Change

http://web.mit.edu/ceepr/www/

MIT Center for Energy and Environmental Policy Research

http://www.nrel.gov/

National Renewable Energy Laboratory

http://www.ofee.gov/

Office of the Federal Environmental Executive

http://www.climateactionproject.com/index2.php

The Presidential Climate Action Project

http://www.rnrf.org/

Renewable Natural Resources Foundation

http://www.energy.gov/index.htm

U.S. Department of Energy

http://www.state.gov/g/oes/climate/

U.S. Department of State – Global Climate Change

http://www.epa.gov/climatechange/

U.S. Environmental Protection Agency – Climate Change

http://www.ecr.gov/

U.S. Institute for Environmental Conflict Resolution

http://www.whitehouse.gov/ceq/

The White House – Council on Environmental Quality

Note: Internet sites included in this listing, other than those of the U.S. Government, should not be construed as an endorsement of the views contained therein.

MUMBAI MONDAYS

A Discussion on Intellectual Property Rights Issues led by Susan McFee

Monday, September 17 American Center Auditorium

6:00 p.m.

Susan McFee will present an introduction to intellectual property rights. Learn about the differences between patents, trademarks, copyrights, and other forms of IPR. How do intellectual property rights promote innovation and protect consumers? How do individuals and companies protect these valuable rights in the global marketplace?

Susan McFee joined the State Department in May 2006 as an economic officer. Before joining the Foreign Service, Susan served as law clerk to a judge on the U.S. Court of Appeals and worked as a corporate and intellectual property rights lawyer as a partner in a Chicago-based law firm and in-house for Ford Motor Company and Tyco. She directed global trademark and copyright programs, established anti-counterfeiting programs in Asia and Southern Africa, and managed the IPR aspects of transactions. She has completed corporate temporary assignments in South Korea, the United Kingdom, and Switzerland, and lectured on intellectual property rights for various organizations. Susan enjoys film, literature, travel and history. She speaks French and is starting to learn Hindi.

FILMS THIS MONTH

Friday, September 14 Friday, September 21 **Network** (1976, color, 121 mins) **Quiz Show** (1994, color, 133 mins)

American Center Auditorium

3:30 and 6:30 p.m.



Scathing satire of the business of television mixes emotional drama with a far-out peek at future programming. Peter Finch won an Oscar as prophet-like figure Howard Beale; other Oscars went to writer Paddy Chayefsky, Beatrice Straight and Faye Dunaway. William Holden and Robert Duvall costar.

Director Robert Redford's acclaimed look at the scandal that rocked America during the Golden Age of Television, the revelation that popular game shows like "Twenty-One" and "The \$64,000 Question" were rigged and champions were fed answers for the sake of ratings, features a superlative cast that includes Ralph Fiennes, Rob Morrow, John Turturro, David Paymer and Paul Scofield.





U. S. ELECTIONS 2008



On Tuesday, November 4, 2008, the world's oldest democracy will go to the polls to choose its 44th president. But the race to occupy the highest office of the world's most vibrant democracy has already begun. The process leading to the final countdown is as complex a democratic exercise as it is fascinating. We are starting a series on "U.S. Presidential Elections 2008" beginning this issue. Look out for some interesting facts, anecdotes, stories and information about the U.S. presidential elections in this column. Our library reference service will be glad to assist you if you are interested in learning more about the election process in the United States. Please send your queries to libref@state.gov.

We begin our journey with the answer to "Why Tuesday after the first Monday in November" question.

Since 1845, this has been the day designated for holding U.S. presidential elections. In 1845, most Americans made their living from agriculture. The Congress felt that the month of November was the most convenient time for farmers and citizens who lived in rural parts of America because, by that time, the harvest was over in most areas, and the climate was mild enough to allow farmers to travel to cast their votes. In those days, the polling stations were few and far between and people had to journey overnight to reach their polling booths, so Monday was allotted as a travel day because Sunday was a day of worship. Also, Congress wanted to make sure that the election never fell on November 1 because it is a Catholic holy day of obligation, All Saints Day. Hence, in 1845, the first Tuesday after the first Monday in November became the official presidential election date.

Edited and designed by Sanjay Mehta and Lalita Bhavnani Copy edited by Eva Doctor Printed by Colorpoint, S. J. Marg, Lower Parel, Mumbai 400 013 Admission to all American Center programs, restricted to persons over 16, will be on a first-come, first-served basis. Please bring the envelope containing this issue of the bulletin for admission (maximum two persons). The auditorium doors will open 30 minutes before the start of the program.